IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously Presented): A thermal transport apparatus comprising:

a substrate having a flow path of a liquid-phase working fluid and a path of a vapor-phase working fluid;

a first wick member disposed on at least one main surface of the substrate;

a communicating hole provided in the substrate for communicating the flow path of the liquid-phase working fluid of the substrate with the first wick member;

grains filling in the communicating hole configured to decrease conductance of the communicating hole; and

a vapor-liquid phase separating region configured to suppress heat transfer between the flow path of the liquid-phase working fluid and the path of the vapor-phase working fluid.

Claim 2 (Previously Presented): The thermal transport apparatus according to claim 1, wherein the substrate includes two substrate layers so that the flow path of the liquid-phase working fluid and the flow path of the vapor-phase working fluid are formed between the two layers.

Claim 3 (Previously Presented): The thermal transport apparatus according to claim 1, wherein the communicating hole is filled with a mixture of a plurality of grains having different grain diameters, and the grain diameters are selected so that the grains having a second grain diameter are disposed in the spaces between the grains having a first grain diameter.

Claim 4 (Previously Presented): The thermal transport apparatus according to claim 1, wherein the communicating hole is filled with a plurality of grains having different grain diameters so that each group of the grains having a common grain diameter forms a layer, and the grain diameter of the layer decreases in the direction nearer to the first wick member.

Claim 5 (Previously Presented): The thermal transport apparatus according to claim 1, wherein the first wick member includes a wick part including a group of the grains, and a base part for supporting the group of the grains constituting the wick part.

Claims 6-7 (Canceled).

Claim 8 (Currently Amended): The thermal transport apparatus according to claim 1, wherein the grains are selected from a group consisting of glass, synthetic resin, metal, and ceramic.

Claim 9 (Previously Presented): The thermal transport apparatus according to claim 1, further comprising an evaporator for evaporating the liquid-phase working fluid.

Claim 10 (Previously Presented): The thermal transport apparatus according to claim 1, further comprising a condenser for condensing the vapor-phase working fluid.

Claim 11 (Previously Presented): The thermal transport apparatus according to claim 10, further comprising a radiator fin provided on the outer surface of the condenser.

Claim 12 (Previously Presented): The thermal transport apparatus according to claim 10, further comprising a second wick member disposed to the condenser.

Claim 13 (Previously Presented): The thermal transport apparatus according to claim 1, wherein the thermal transport apparatus is coupled to an electronic apparatus and configured to remove heat from the electronic apparatus.

Claim 14 (Previously Presented): A thermal transport apparatus comprising:

a first substrate including a flow path of a liquid-phase working fluid and a path of a vapor-phase working fluid;

a second substrate including an evaporator wick communicating hole, an evaporation part communicating hole, a condenser wick communicating hole, a condensation part communicating hole, and a vapor-liquid phase separating region;

an evaporator disposed on the second substrate;

an evaporator wick member disposed on the evaporator;

grains filling in the evaporator wick communicating hole configured to decrease conductance of the evaporator wick communicating hole;

a condenser disposed on the second substrate; and

a condenser wick member disposed on the condenser.

Claim 15 (Previously Presented): The thermal transport apparatus according to claim 14, wherein the evaporator wick communicating hole is filled with a mixture of a plurality of grains having different grain diameters, and the grain diameters are selected so that the grains having a second grain diameter are disposed in the spaces between the grains having a first grain diameter.

Claim 16 (Previously Presented): The thermal transport apparatus according to claim 14, wherein the evaporator wick communicating hole is filled with a plurality of grains having different grain diameters so that each group of the grains having a common grain diameter forms a layer, and the grain diameter of the layer decreases in the direction nearer to the evaporator wick member.

Claim 17 (Previously Presented): The thermal transport apparatus according to claim 14, wherein the evaporator wick member includes a wick part and the wick part includes a group of the grains, and a base part for supporting the group of the grains constituting the wick part.

Claim 18 (Currently Amended): The thermal transport apparatus according to claim 14, wherein the grains are made of material selected from a group consisting of glass, synthetic resin, metal, and ceramic.

Claim 19 (Currently Amended): The thermal transport apparatus according to claim 14, wherein the first substrate and the second substrate are made of material selected from a group consisting of glass, synthetic resin, ~~Teflon (registered trade name)~~ polytetrafluoroethylene, and ~~PDMS (~~polydimethylsiloxane[[)]].

Claim 20 (Previously Presented): The thermal transport apparatus according to claim 14, wherein the first substrate and the second substrate are bound together by an anode coupling method, adhesive bonding, pressure bonding, or weld bonding.